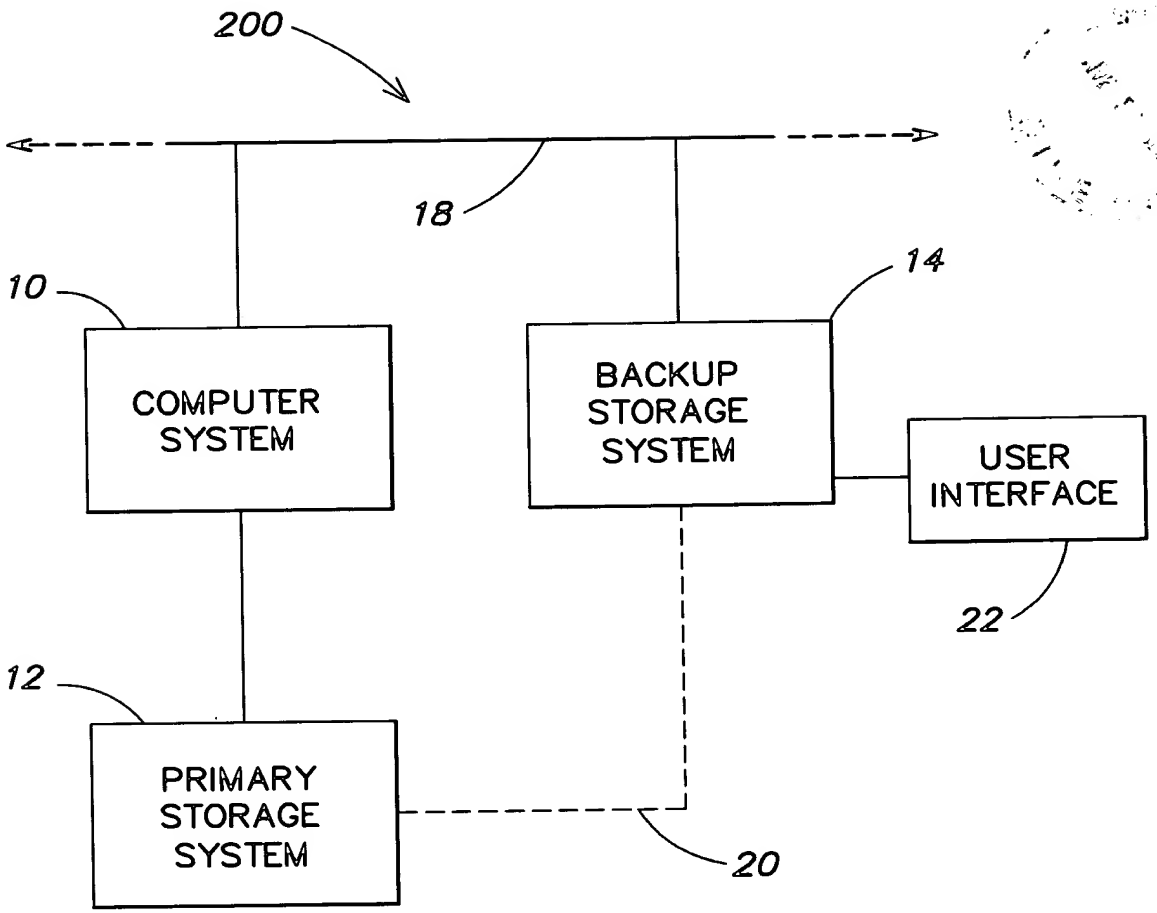

FIG. 1
(PRIOR ART)

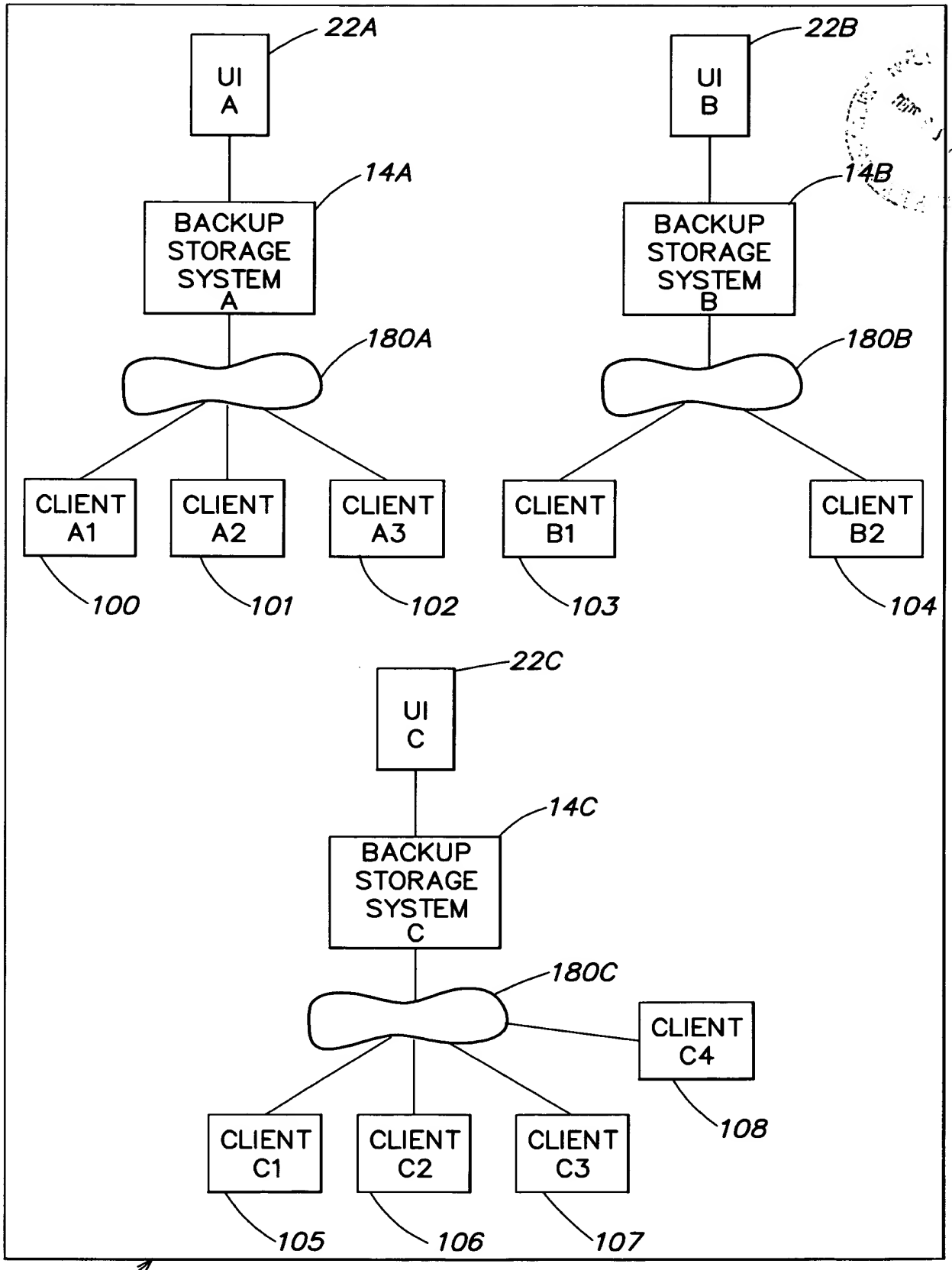

FIG. 2
(PRIOR ART)

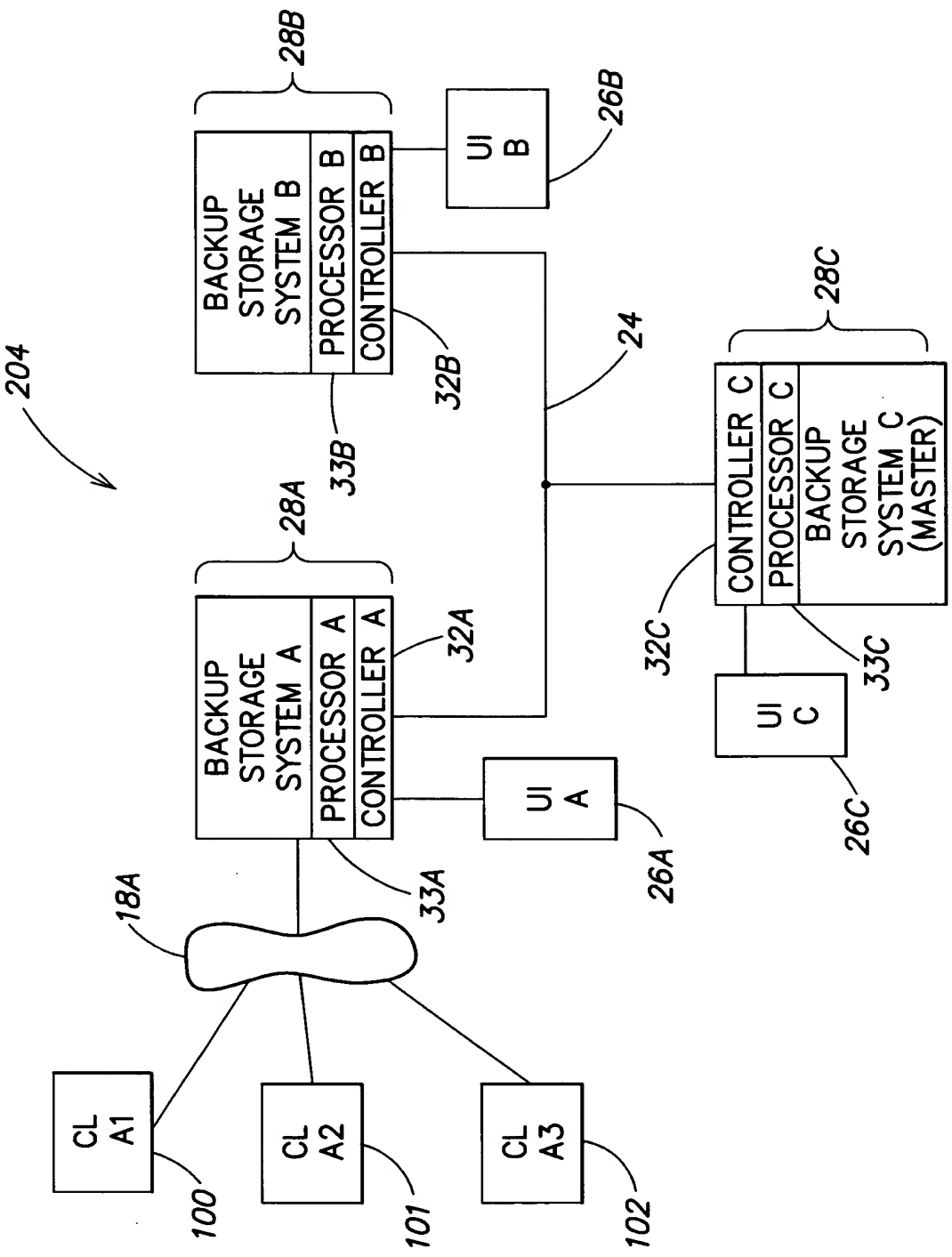
204
28B
BACKUP STORAGE SYSTEM B
PROCESSOR B
CONTROLLER B
UI B
26B
32B
33B
24
28C
CONTROLLER C
PROCESSOR C
BACKUP STORAGE SYSTEM C (MASTER)
32C
33C
UI C
26C
28A
BACKUP STORAGE SYSTEM A
PROCESSOR A
CONTROLLER A
32A
33A
UI A
26A
18A
CL A1
CL A2
CL A3
100
101
102

FIG. 3

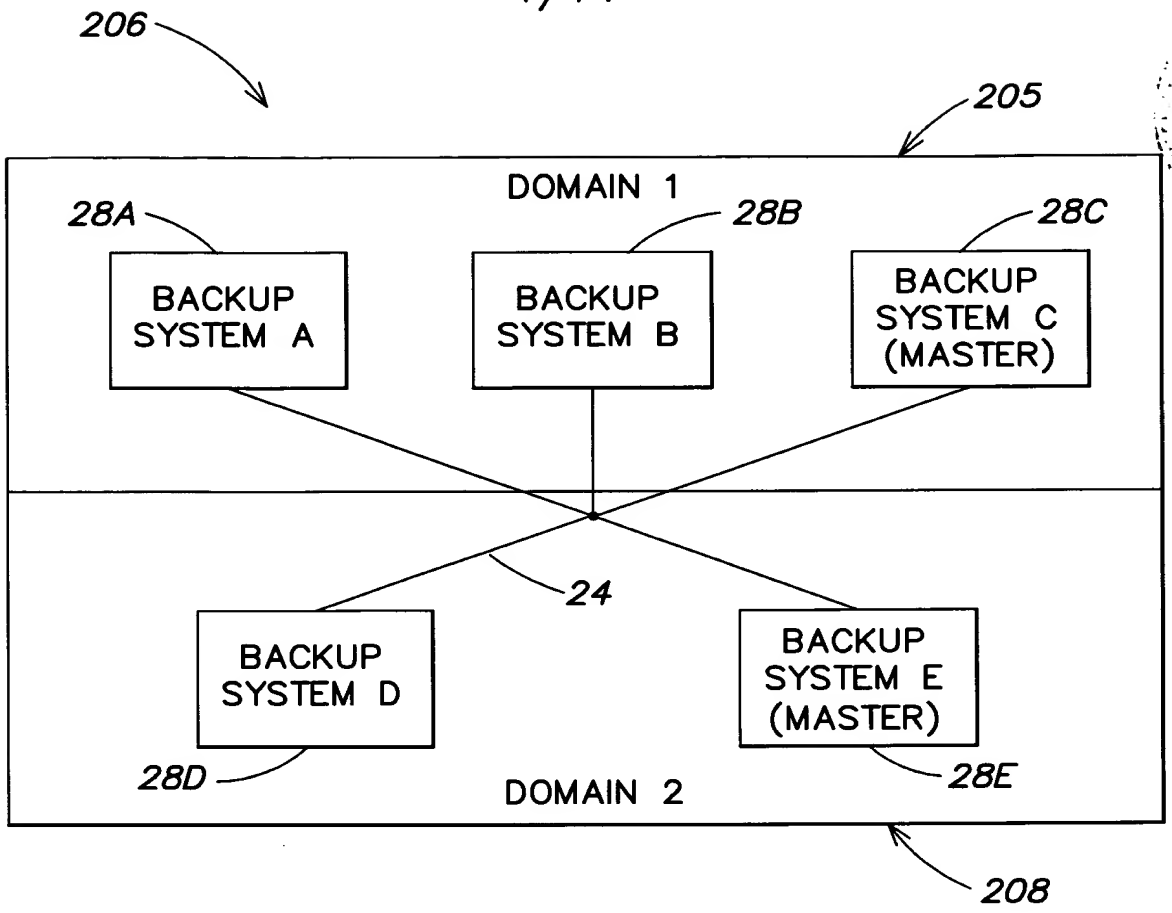
206
205
DOMAIN 1
28A
28B
28C
BACKUP SYSTEM A
BACKUP SYSTEM B
BACKUP SYSTEM C (MASTER)
24
BACKUP SYSTEM D
BACKUP SYSTEM E (MASTER)
28D
28E
DOMAIN 2
208

FIG. 4

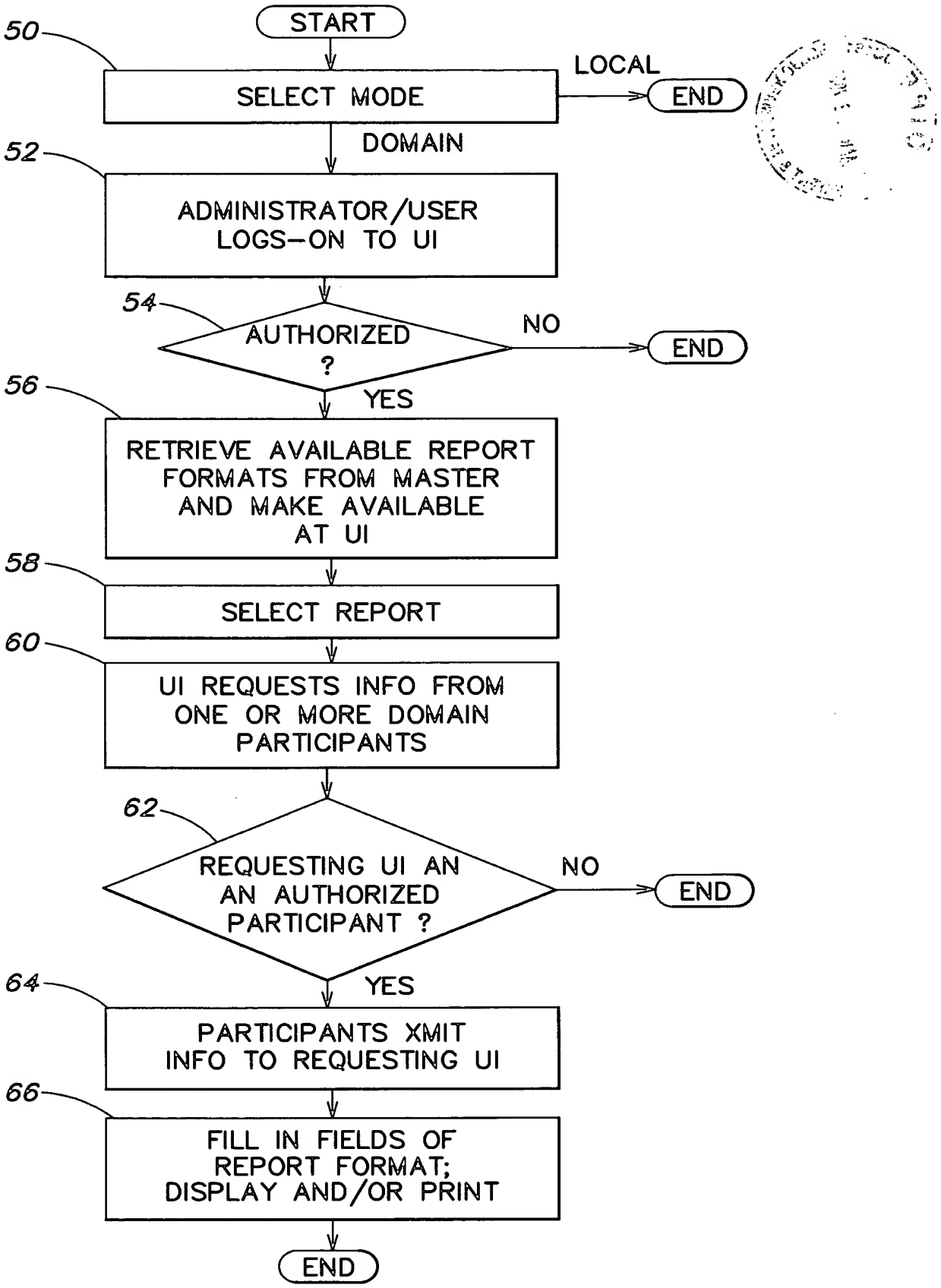
START
50
SELECT MODE
LOCAL
END
DOMAIN
52
ADMINISTRATOR/USER LOGS-ON TO UI
54
AUTHORIZED ?
NO
END
YES
56
RETRIEVE AVAILABLE REPORT FORMATS FROM MASTER AND MAKE AVAILABLE AT UI
58
SELECT REPORT
60
UI REQUESTS INFO FROM ONE OR MORE DOMAIN PARTICIPANTS
62
REQUESTING UI AN AN AUTHORIZED PARTICIPANT ?
NO
END
YES
64
PARTICIPANTS XMIT INFO TO REQUESTING UI
66
FILL IN FIELDS OF REPORT FORMAT; DISPLAY AND/OR PRINT
END

FIG. 5

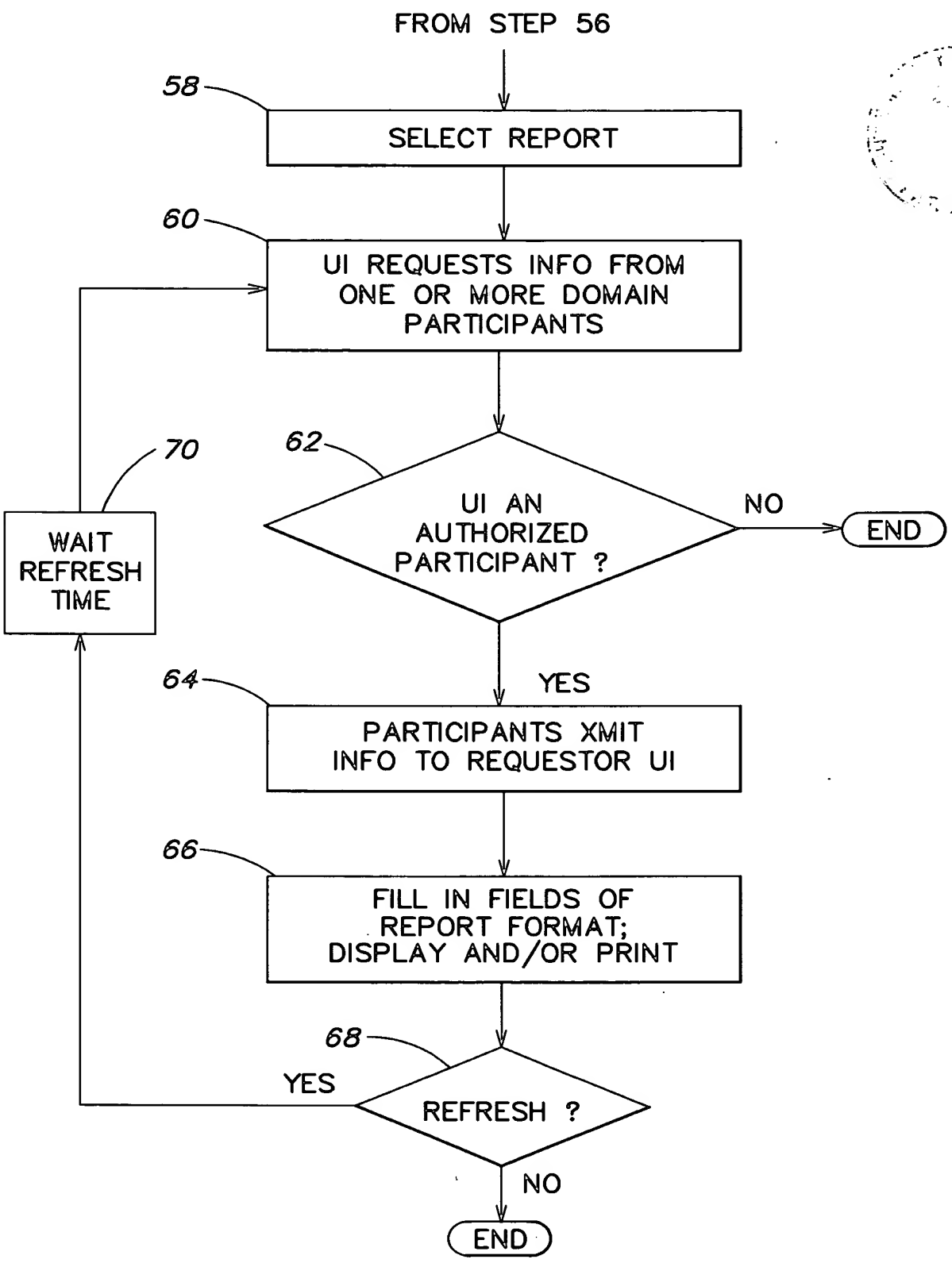
FROM STEP 56
58
SELECT REPORT
60
UI REQUESTS INFO FROM ONE OR MORE DOMAIN PARTICIPANTS
62
UI AN AUTHORIZED PARTICIPANT ?
NO
END
YES
64
PARTICIPANTS XMIT INFO TO REQUESTOR UI
66
FILL IN FIELDS OF REPORT FORMAT; DISPLAY AND/OR PRINT
68
REFRESH ?
YES
NO
END
70
WAIT REFRESH TIME

FIG. 6

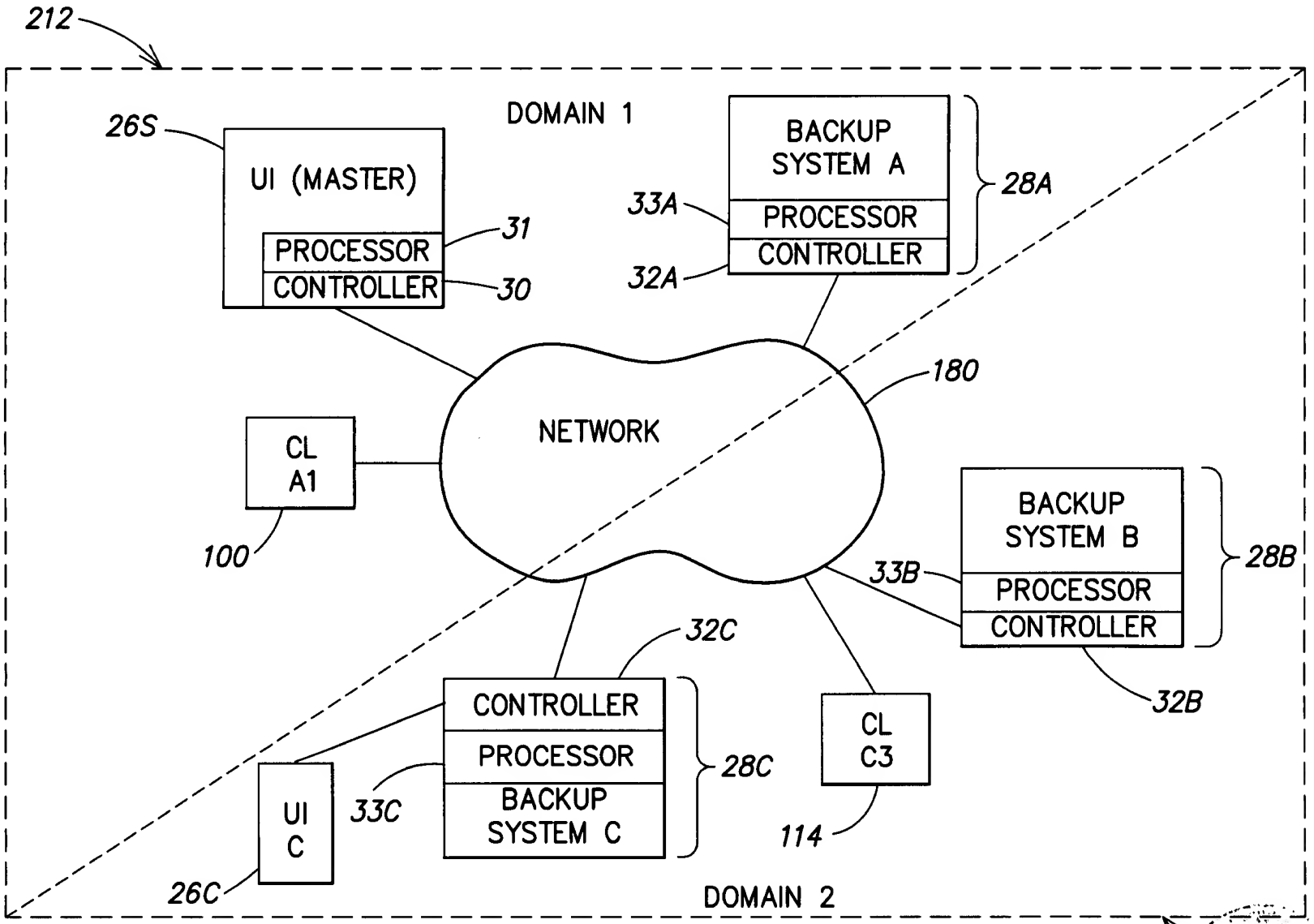
212
210
DOMAIN 1
26S
UI (MASTER)
PROCESSOR
CONTROLLER
31
30
BACKUP SYSTEM A
33A
32A
28A
NETWORK
180
CL A1
100
BACKUP SYSTEM B
33B
28B
32B
32C
CONTROLLER
PROCESSOR
BACKUP SYSTEM C
28C
UI C
33C
26C
CL C3
114
DOMAIN 2
214

FIG. 7

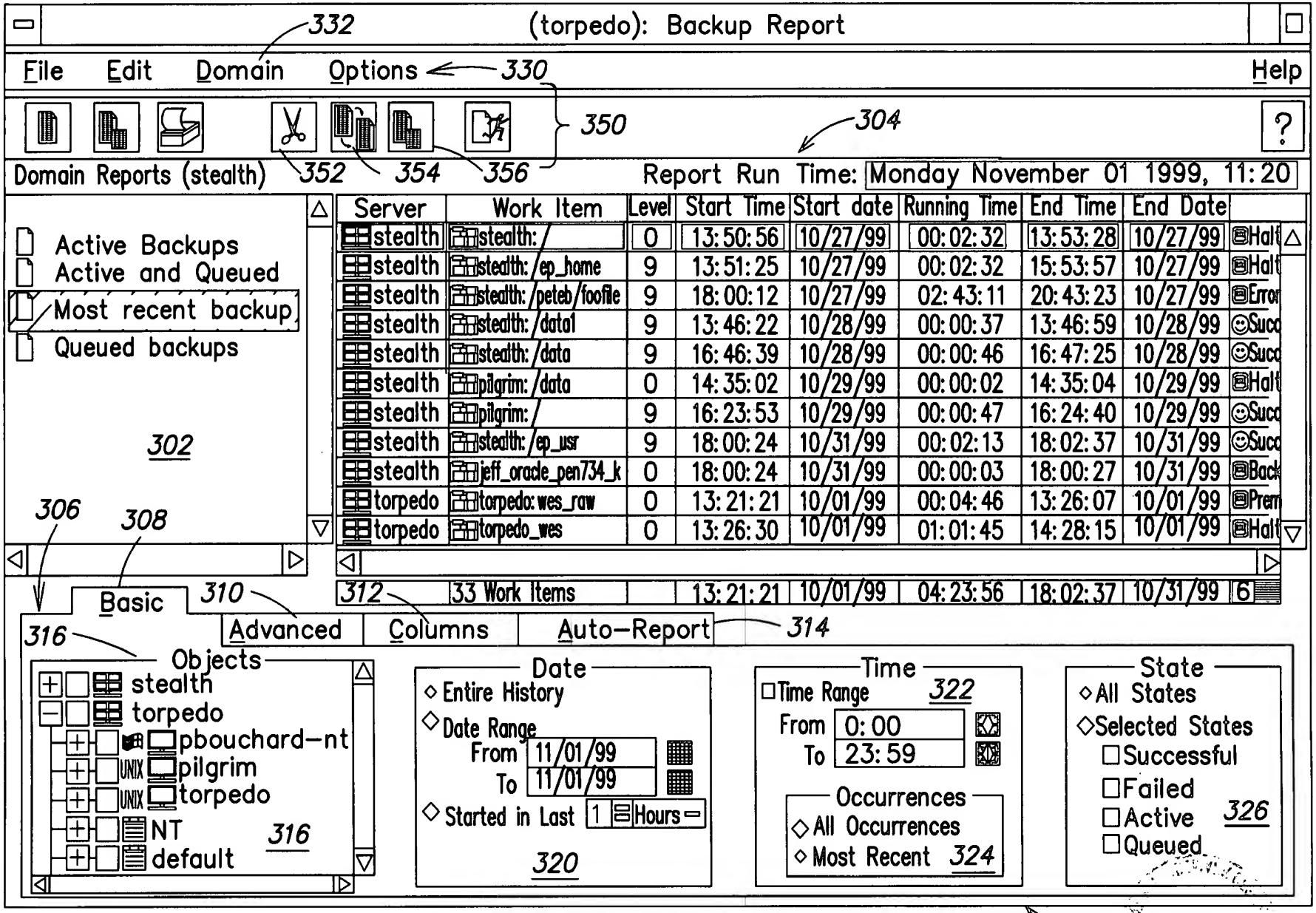
(torpedo): Backup Report
332
File
Edit
Domain
Options
330
Help
350
304
352
354
356
Domain Reports (stealth)
Report Run Time: Monday November 01 1999, 11:20
Active Backups
Active and Queued
Most recent backup
Queued backups
302
306
308
Server
Work Item
Level
Start Time
Start date
Running Time
End Time
End Date
stealth stealth: / 0 13:50:56 10/27/99 00:02:32 13:53:28 10/27/99
stealth stealth: /ep_home 9 13:51:25 10/27/99 00:02:32 15:53:57 10/27/99
stealth stealth: /peteb/foofile 9 18:00:12 10/27/99 02:43:11 20:43:23 10/27/99
stealth stealth: /data1 9 13:46:22 10/28/99 00:00:37 13:46:59 10/28/99
stealth stealth: /data 9 16:46:39 10/28/99 00:00:46 16:47:25 10/28/99
stealth pilgrim: /data 0 14:35:02 10/29/99 00:00:02 14:35:04 10/29/99
stealth pilgrim: / 9 16:23:53 10/29/99 00:00:47 16:24:40 10/29/99
stealth stealth: /ep_usr 9 18:00:24 10/31/99 00:02:13 18:02:37 10/31/99
stealth jeff_oracle_pen734_k 0 18:00:24 10/31/99 00:00:03 18:00:27 10/31/99
torpedo torpedo: wes_raw 0 13:21:21 10/01/99 00:04:46 13:26:07 10/01/99
torpedo torpedo_wes 0 13:26:30 10/01/99 01:01:45 14:28:15 10/01/99
312
33 Work Items 13:21:21 10/01/99 04:23:56 18:02:37 10/31/99
Basic
310
Advanced
Columns
Auto-Report
314
316
Objects
stealth
torpedo
pbouchard-nt
pilgrim
torpedo
NT
default
316
Date
Entire History
Date Range
From 11/01/99
To 11/01/99
Started in Last 1 Hours
320
Time
Time Range
322
From 0:00
To 23:59
Occurrences
All Occurrences
Most Recent
324
State
All States
Selected States
Successful
Failed
Active
Queued
326
300

FIG. 8

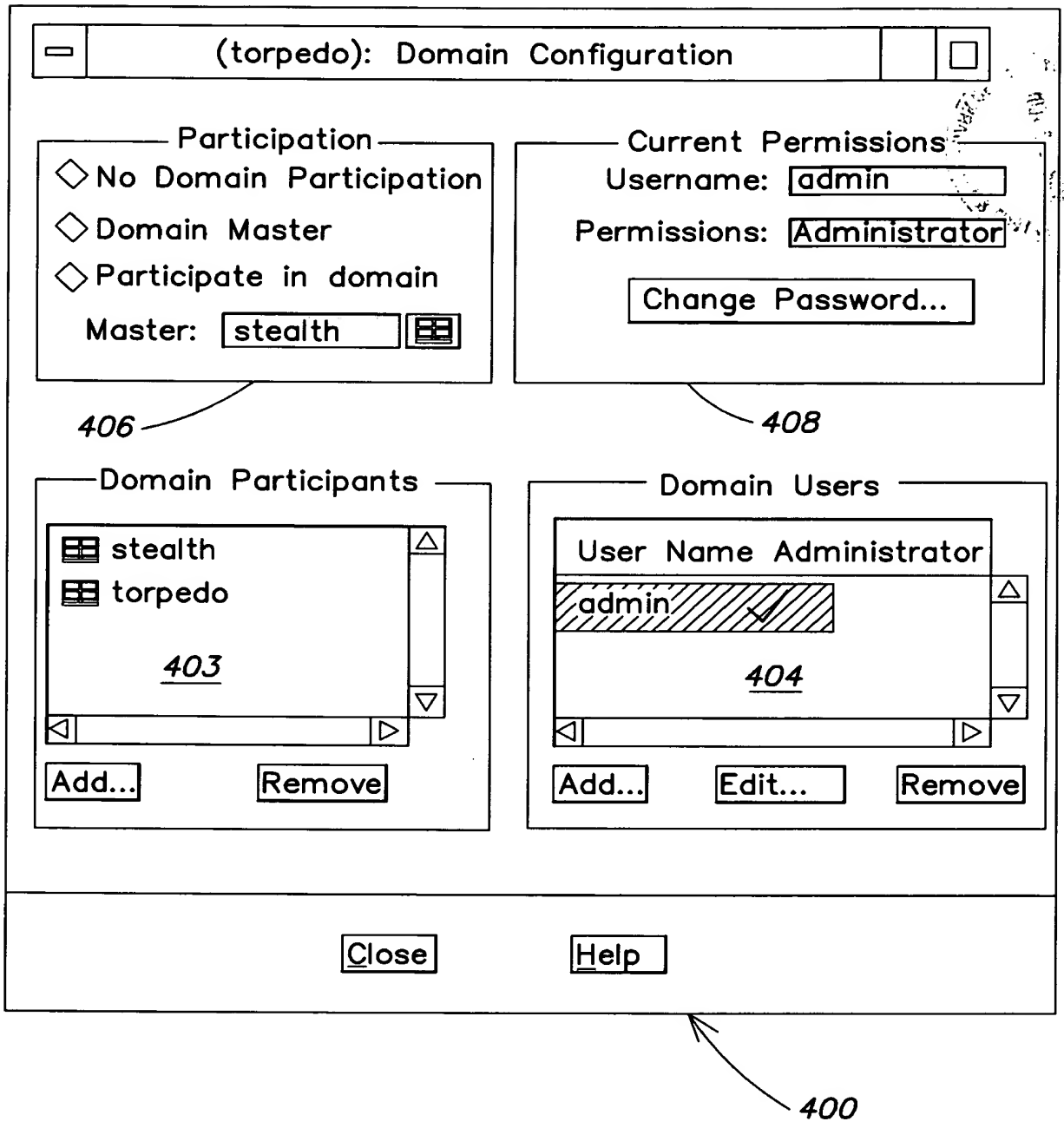
(torpedo): Domain Configuration
Participation
No Domain Participation
Domain Master
Participate in domain
Master: stealth
406
Current Permissions
Username: admin
Permissions: Administrator
Change Password...
408
Domain Participants
stealth
torpedo
403
Add...
Remove
Domain Users
User Name Administrator
admin
404
Add...
Edit...
Remove
Close
Help
400

FIG. 9

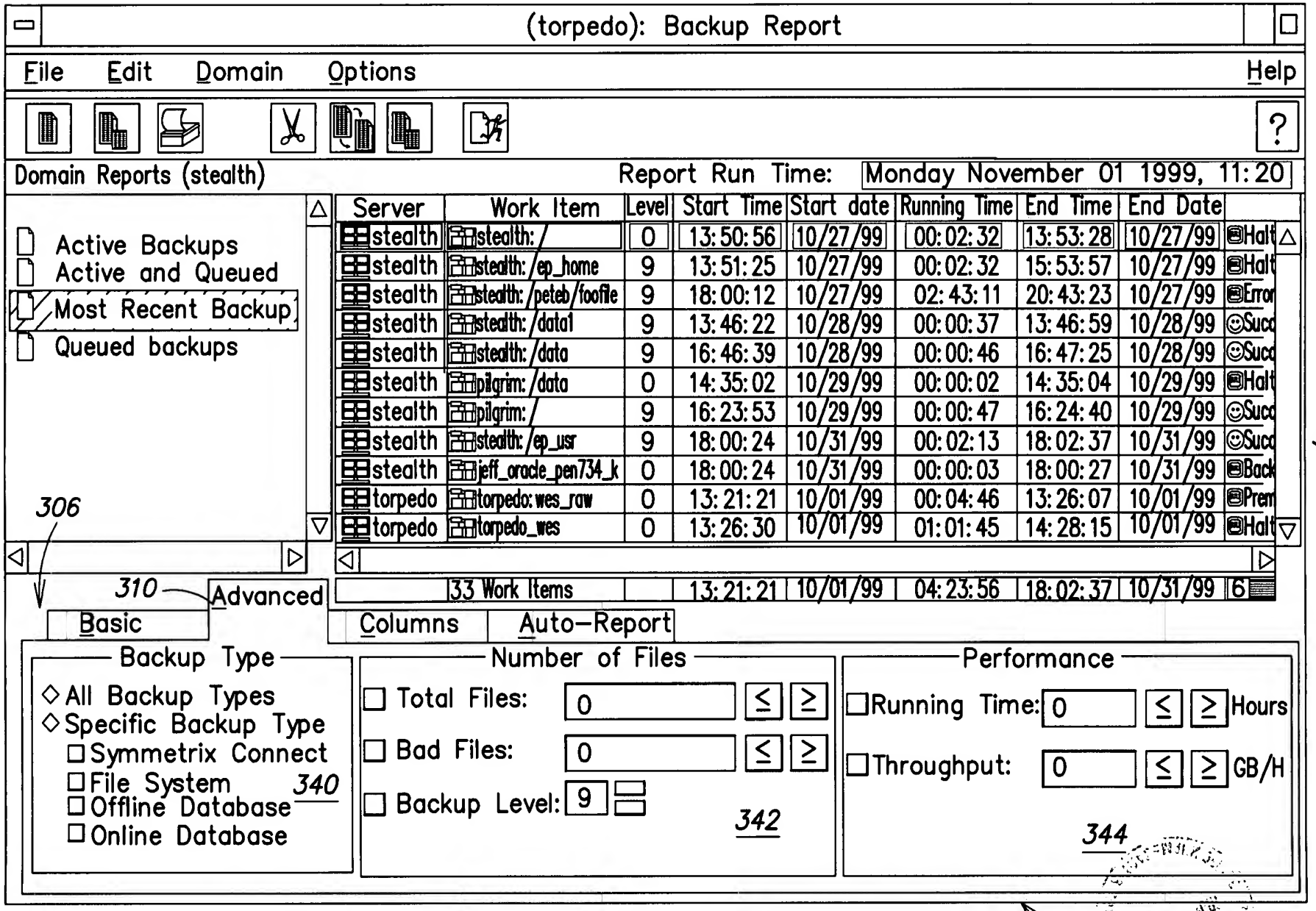
(torpedo): Backup Report
File Edit Domain Options Help
Domain Reports (stealth)
Report Run Time: Monday November 01 1999, 11:20
Active Backups
Active and Queued
Most Recent Backup
Queued backups
306
Server | Work Item | Level | Start Time | Start date | Running Time | End Time | End Date
stealth | stealth:/ | 0 | 13:50:56 | 10/27/99 | 00:02:32 | 13:53:28 | 10/27/99 | Halt
stealth | stealth:/ep_home | 9 | 13:51:25 | 10/27/99 | 00:02:32 | 15:53:57 | 10/27/99 | Halt
stealth | stealth:/peteb/foofile | 9 | 18:00:12 | 10/27/99 | 02:43:11 | 20:43:23 | 10/27/99 | Error
stealth | stealth:/data1 | 9 | 13:46:22 | 10/28/99 | 00:00:37 | 13:46:59 | 10/28/99 | Succ
stealth | stealth:/data | 9 | 16:46:39 | 10/28/99 | 00:00:46 | 16:47:25 | 10/28/99 | Succ
stealth | pilgrim:/data | 0 | 14:35:02 | 10/29/99 | 00:00:02 | 14:35:04 | 10/29/99 | Halt
stealth | pilgrim:/ | 9 | 16:23:53 | 10/29/99 | 00:00:47 | 16:24:40 | 10/29/99 | Succ
stealth | stealth:/ep_usr | 9 | 18:00:24 | 10/31/99 | 00:02:13 | 18:02:37 | 10/31/99 | Succ
stealth | jeff_oracle_pen734_k | 0 | 18:00:24 | 10/31/99 | 00:00:03 | 18:00:27 | 10/31/99 | Back
torpedo | torpedo:wes_raw | 0 | 13:21:21 | 10/01/99 | 00:04:46 | 13:26:07 | 10/01/99 | Prem
torpedo | torpedo_wes | 0 | 13:26:30 | 10/01/99 | 01:01:45 | 14:28:15 | 10/01/99 | Halt
33 Work Items | 13:21:21 | 10/01/99 | 04:23:56 | 18:02:37 | 10/31/99 | 6
310
Basic
Advanced
Columns
Auto-Report
Backup Type
◇ All Backup Types
◇ Specific Backup Type
☐ Symmetrix Connect
☐ File System
☐ Offline Database
☐ Online Database
340
Number of Files
☐ Total Files: 0 ≤ ≥
☐ Bad Files: 0 ≤ ≥
☐ Backup Level: 9
342
Performance
☐ Running Time: 0 ≤ ≥ Hours
☐ Throughput: 0 ≤ ≥ GB/H
344
300

FIG. 10

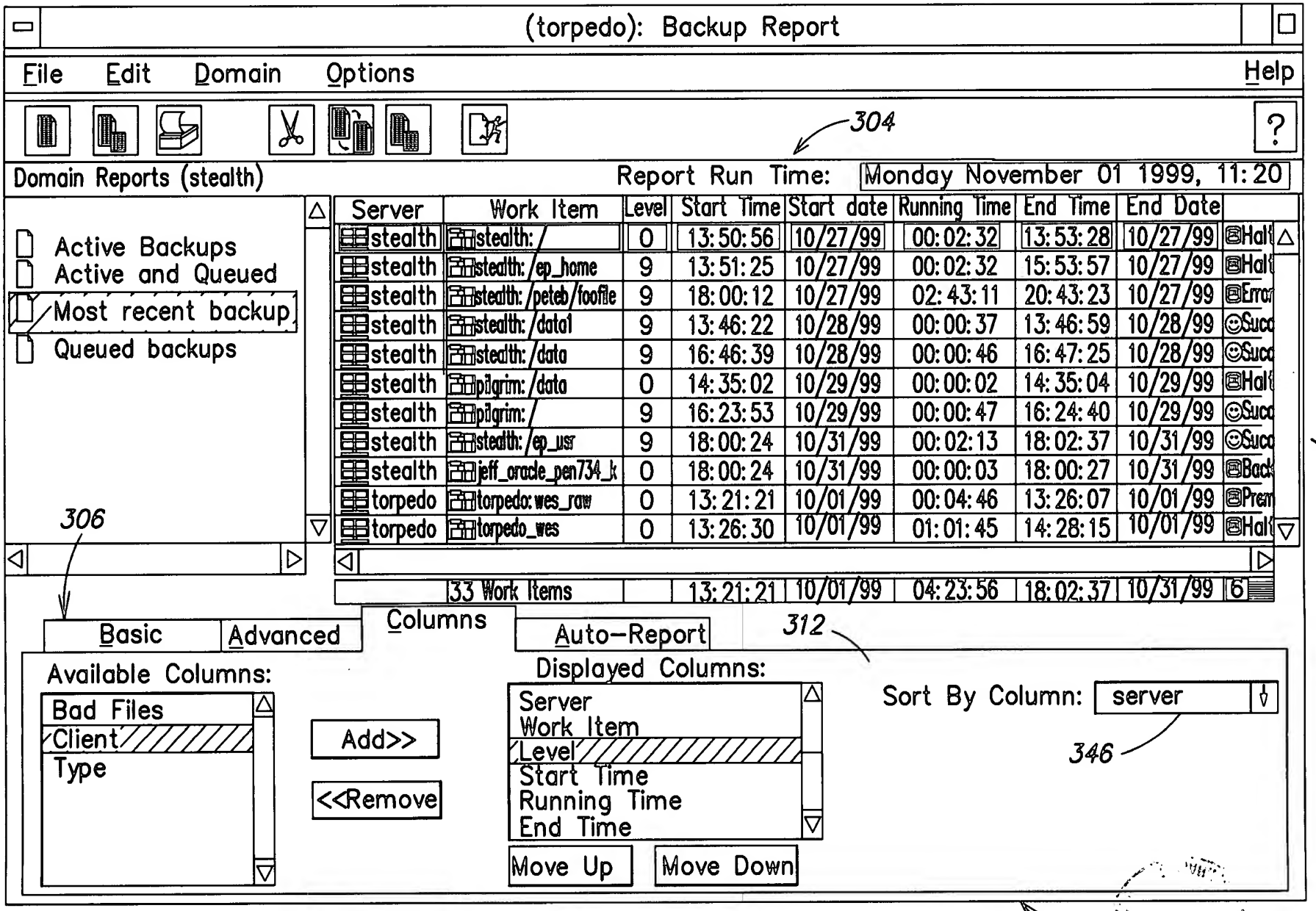
(torpedo): Backup Report
File
Edit
Domain
Options
Help
304
Domain Reports (stealth)
Report Run Time:
Monday November 01 1999, 11:20
Active Backups
Active and Queued
Most recent backup
Queued backups
306
Server
Work Item
Level
Start Time
Start date
Running Time
End Time
End Date
stealth stealth: 0 13:50:56 10/27/99 00:02:32 13:53:28 10/27/99
stealth stealth: /ep_home 9 13:51:25 10/27/99 00:02:32 15:53:57 10/27/99
stealth stealth: /peteb/foofile 9 18:00:12 10/27/99 02:43:11 20:43:23 10/27/99
stealth stealth: /data1 9 13:46:22 10/28/99 00:00:37 13:46:59 10/28/99
stealth stealth: /data 9 16:46:39 10/28/99 00:00:46 16:47:25 10/28/99
stealth pilgrim: /data 0 14:35:02 10/29/99 00:00:02 14:35:04 10/29/99
stealth pilgrim: / 9 16:23:53 10/29/99 00:00:47 16:24:40 10/29/99
stealth stealth: /ep_usr 9 18:00:24 10/31/99 00:02:13 18:02:37 10/31/99
stealth jeff_oracle_pen734_k 0 18:00:24 10/31/99 00:00:03 18:00:27 10/31/99
torpedo torpedo: wes_raw 0 13:21:21 10/01/99 00:04:46 13:26:07 10/01/99
torpedo torpedo_wes 0 13:26:30 10/01/99 01:01:45 14:28:15 10/01/99
33 Work Items 13:21:21 10/01/99 04:23:56 18:02:37 10/31/99
Basic
Advanced
Columns
Auto-Report
312
Available Columns:
Bad Files
Client
Type
Add>>
<<Remove
Displayed Columns:
Server
Work Item
Level
Start Time
Running Time
End Time
Move Up
Move Down
Sort By Column:
server
346
300

FIG. 11

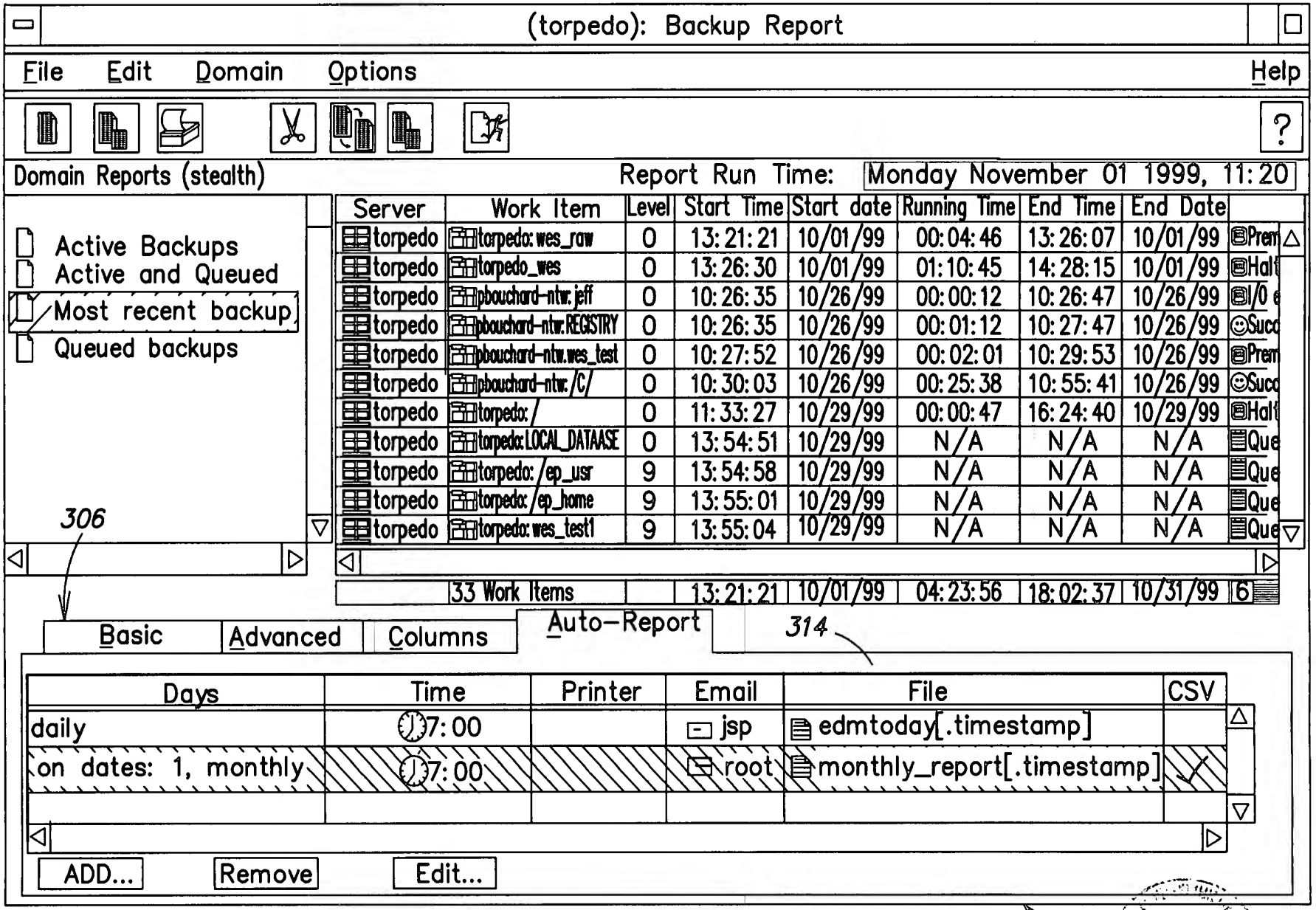
(torpedo): Backup Report
File Edit Domain Options Help
Domain Reports (stealth)
Report Run Time: Monday November 01 1999, 11:20
Active Backups
Active and Queued
Most recent backup
Queued backups
306
Server | Work Item | Level | Start Time | Start date | Running Time | End Time | End Date
torpedo | torpedo:wes_raw | 0 | 13:21:21 | 10/01/99 | 00:04:46 | 13:26:07 | 10/01/99 | Prem
torpedo | torpedo_wes | 0 | 13:26:30 | 10/01/99 | 01:10:45 | 14:28:15 | 10/01/99 | Halt
torpedo | pbouchard-ntw:jeff | 0 | 10:26:35 | 10/26/99 | 00:00:12 | 10:26:47 | 10/26/99 | I/O
torpedo | pbouchard-ntw:REGISTRY | 0 | 10:26:35 | 10/26/99 | 00:01:12 | 10:27:47 | 10/26/99 | Succ
torpedo | pbouchard-ntw:wes_test | 0 | 10:27:52 | 10/26/99 | 00:02:01 | 10:29:53 | 10/26/99 | Prem
torpedo | pbouchard-ntw:/C/ | 0 | 10:30:03 | 10/26/99 | 00:25:38 | 10:55:41 | 10/26/99 | Succ
torpedo | torpedo:/ | 0 | 11:33:27 | 10/29/99 | 00:00:47 | 16:24:40 | 10/29/99 | Halt
torpedo | torpedo:LOCAL_DATAASE | 0 | 13:54:51 | 10/29/99 | N/A | N/A | N/A | Que
torpedo | torpedo:/ep_usr | 9 | 13:54:58 | 10/29/99 | N/A | N/A | N/A | Que
torpedo | torpedo:/ep_home | 9 | 13:55:01 | 10/29/99 | N/A | N/A | N/A | Que
torpedo | torpedo:wes_test1 | 9 | 13:55:04 | 10/29/99 | N/A | N/A | N/A | Que
33 Work Items | 13:21:21 | 10/01/99 | 04:23:56 | 18:02:37 | 10/31/99 | 6
Basic Advanced Columns Auto-Report
314
Days | Time | Printer | Email | File | CSV
daily | 7:00 | | jsp | edmtoday[.timestamp] |
on dates: 1, monthly | 7:00 | | root | monthly_report[.timestamp] | ✓
ADD... Remove Edit...
300

FIG. 12

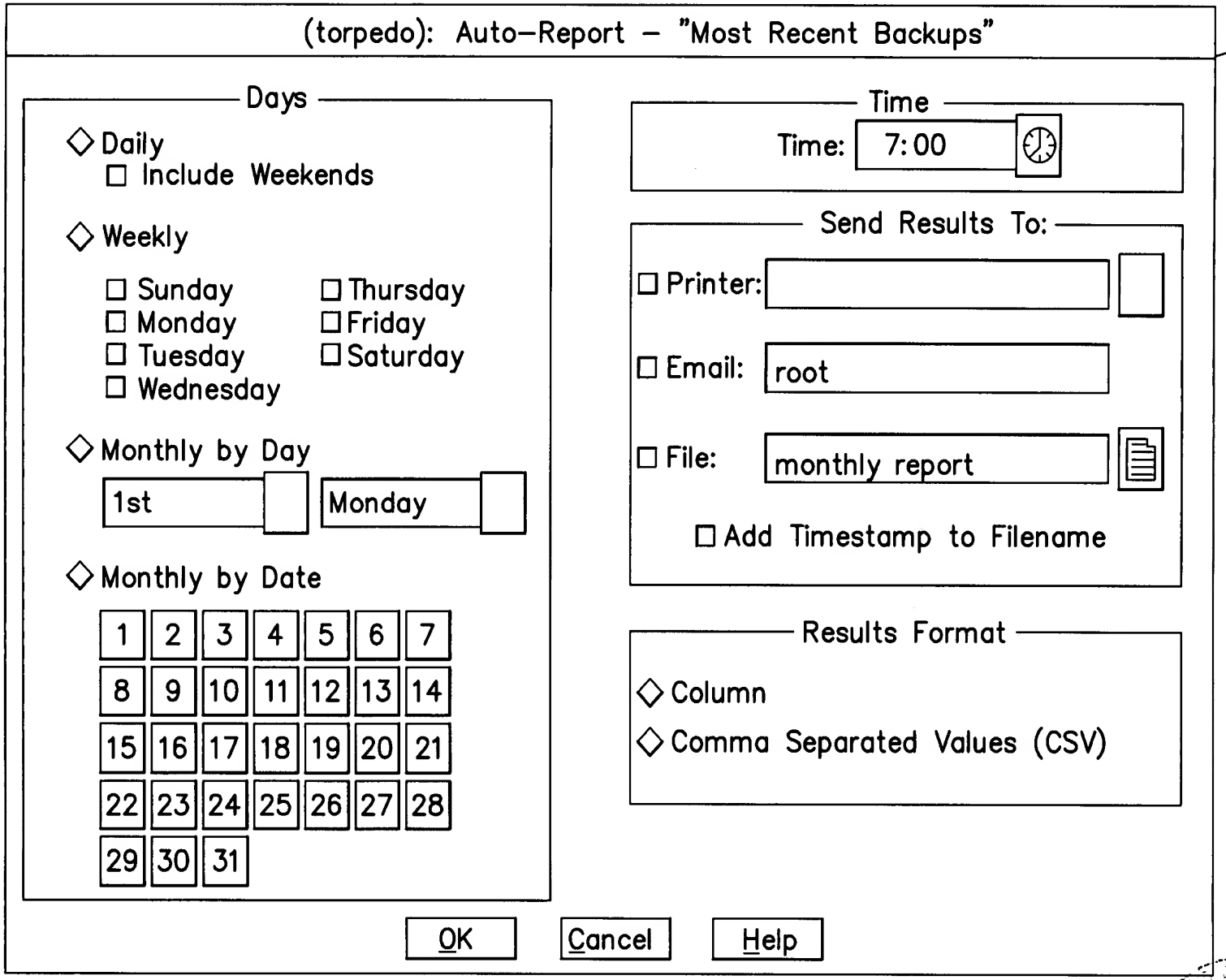
(torpedo): Auto–Report – "Most Recent Backups"
402
Days
Daily
Include Weekends
Weekly
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Monthly by Day
1st
Monday
Monthly by Date
1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31
Time
Time: 7:00
Send Results To:
Printer:
Email: root
File: monthly report
Add Timestamp to Filename
Results Format
Column
Comma Separated Values (CSV)
OK
Cancel
Help

FIG. 13

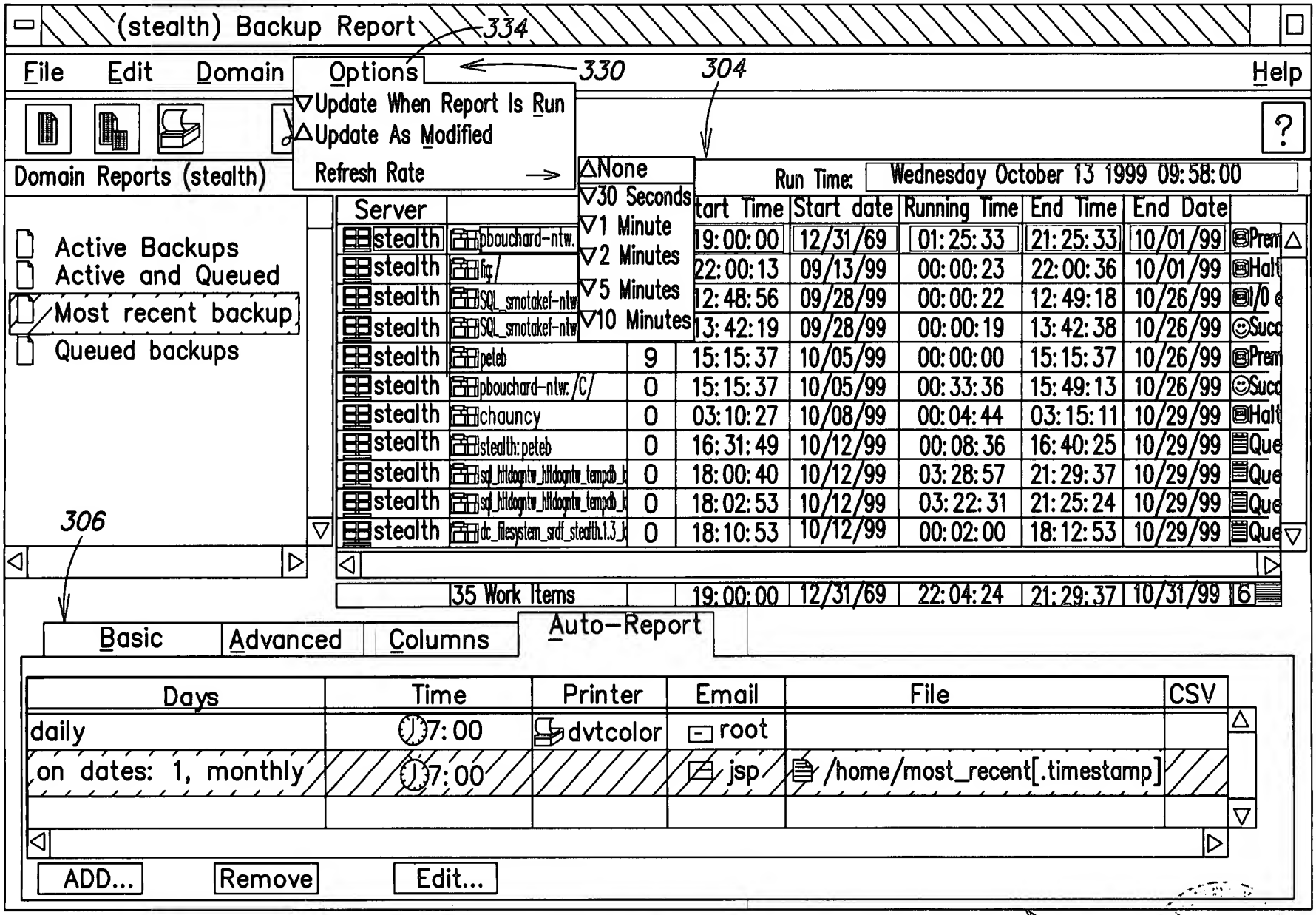
(stealth) Backup Report
334
File
Edit
Domain
Options
330
304
Help
Update When Report Is Run
Update As Modified
Refresh Rate
None
30 Seconds
1 Minute
2 Minutes
5 Minutes
10 Minutes
Domain Reports (stealth)
Run Time: Wednesday October 13 1999 09:58:00
Active Backups
Active and Queued
Most recent backup
Queued backups
Server
Start Time
Start date
Running Time
End Time
End Date
stealth
35 Work Items
306
Basic
Advanced
Columns
Auto-Report
Days
Time
Printer
Email
File
CSV
daily
7:00
dvtcolor
root
on dates: 1, monthly
7:00
jsp
/home/most_recent[.timestamp]
ADD...
Remove
Edit...
300

FIG. 14